### REMARKS

This is a full and timely response to the final Office Action mailed January 8, 2007.

Reconsideration and allowance of the application and presently pending claims are respectfully requested.

# Present Status of Patent Application

Upon entry of the amendments in this response, claims 1, 3-7, 9, 22, and 24-30 are currently pending in the present application. More specifically, claims 1, 4, 5, 22, and 26 have been currently amended with no addition of new matter; claims 2, 8, 10-21, 23, and 27 have been canceled without prejudice, waiver, or disclaimer; claim 3 is an original claim; and claims 6, 7, 9, 24, 25, 28-30 have been previously presented. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

# A. Allowable Subject Matter

# Office action statement

Claims 2, 8-9, 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if incorporate into independent claims. Applicant is suggested to incorporate transistors as the circuit devices in claims 28, 29 and all independent claims. Applicant is also suggested to cancel claim 10, because it is obvious over the prior art of record.

# Response to the indication of allowability

Applicants wish to place on record their sincere appreciation for Examiner's indication of allowability of claims 2, 8-9, and 22-25, subject to their incorporation into independent claims. Applicants have canceled claims 2, 8, and 23 and incorporated the subject matter of these claims into the corresponding independent claims (claim 2 into claim 1, claim 23 into claim 4, and claim 8 into claim 5) taking care to maintain accurate claim dependency of other claims after this amendment. As a result of this amendment, Applicants respectfully request allowance of claims 1, 3-7, 9, 22, 24-26 and 30, which are now the allowable independent claims together with their respective dependent claims.

With respect to the Office action suggestion towards canceling claim 10, Applicants respectfully traverse the Office action statement that the claim is obvious in light of the prior art. However, in the interests of moving forward prosecution and obtaining allowance of the patent, Applicants have opted to cancel claim 10. However, Applications retain the right to introduce this

canceled claim in a continuing application if they so choose and do not intend to dedicate the subject matter to the public.

As for the Office action suggestion that transistors be incorporated into claims 28, 29 and all other independent claims please refer to Applicants' remarks below.

# B. Claim Rejections under 35 U.S.C. §112

# Statement of the Rejection

### Claims 8 and 26

Claims 8 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8 and 26 are vague and indefinite, as it is unclear whether the locations that hold the conductive polymer dots also hold the non-conductive polymer dots. It is unclear whether the dots are mixture of conductive and non-conductive polymer dots. What is the conductivity of the dots in the end?

# Response to the Rejection

# Claim 8

Applicants fail to understand the rejection of claim 8 under 35 U.S.C. 112 because claim 8 does not refer to non-conductive polymer dots. Furthermore, in the same Office action, it has been indicated that claim 8 is allowable subject to incorporation into its independent claim (claim 5). Applicants have currently canceled claim 8 and incorporated the subject matter of claim 8 into claim 5.

As a result of the cancellation, Applicants respectfully assert that the rejection of claim 8 under 35 U.S.C. 112 has been rendered moot

## Claim 26

Applicants have currently amended claim 26 to clarify the ambiguity. Amended claim 26 now cites "at least one well" holding a nonconductive polymer dot in addition to the group of wells holding the conductive polymer dots as cited in claim 5.

As a result of this amendment, Applicants respectfully request withdrawal of the rejection, followed by allowance of claim 26.

# C. Claim Rejections under 35 U.S.C. §103

## Statement of the Rejection

Claims 1, 3-7, 10, 12-13, 26-30 are rejected under 35 U.S.C. §103(a) as being unpatentable over Jacobsen et al., (US 6468638) in view of Verlinden (US 6861136).

# Response to the Rejection

## Claim 1

The ridges of claim 1 are described in various sections of Applicants' specification. For example, paragraph [17] lines 10-14 describe one example of such ridges. The prior art does not disclose at least this aspect of Applicants' claim 1. Furthermore, claim 1 has been currently amended to include the subject matter of claim 2 that has been indicated as allowable. Consequently, Applicants respectfully assert that claim 1 is allowable and hereby request withdrawal of the rejection followed by allowance of the claim.

### Claim 3

Because claim 1 is allowable, claim 3 that depends directly on claim 1 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Consequently, Applicants respectfully request withdrawal of the rejection, followed by allowance of claim 3.

### Claim 4

The prior art does not disclose at least the chemical treatment aspect of claim 4. Furthermore, claim 4 has been currently amended to include the subject matter of claim 23 that has been indicated as allowable. Consequently, Applicants respectfully assert that claim 4 is allowable and hereby request withdrawal of the rejection followed by allowance of the claim.

## Claim 5

The prior art does not disclose dots in a liquid phase. Furthermore, claim 5 has been currently amended to include the subject matter of claim 8 that has been indicated as allowable. Consequently, Applicants respectfully assert that claim 5 is allowable and hereby request withdrawal of the rejection followed by allowance of claim 5.

### Claims 6 and 7

Because claim 5 is allowable, claims 6 and 7 that each depends directly on claim 5 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Consequently, Applicants respectfully request withdrawal of the rejection, followed by allowance of claims 6 and 7.

# Claims 10 and 12-13

Claims 10 and 12-13 have been currently canceled thereby rendering moot the rejection of these claims

## Claim 26

Because claim 5 is allowable, currently amended claim 26 that depends directly on claim 5 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Consequently, Applicants respectfully request withdrawal of the rejection, followed by allowance of claim 26,

### Claim 27

Claim 27 has been currently canceled thereby rendering moot the rejection of this claim.

# Claim 28

Independent claim 28 cites features that are different from other independent claims. For example, claim 28 cites: "a first set of ridges formed in a first direction on the substrate, at least one of the ridges having a first height and at least another one of the ridges having a second height" thereby defining two heights for two ridges.

In contrast, independent claim 1 cites: "a first set of ridges formed in a first direction on the substrate, at least one of the ridges having a first portion of a first height and having a second portion of a second height," thereby defining two heights for a single ridge.

However, the Office action fails to identify where in the cited prior art can be found anticipatory elements for this aspect of claim 28. Unfortunately, the rejection clumps all the independent claims under one category and attempts to use rejection language that is common to all claims ignoring the different claim elements that provide variance to the scope of claim coverage for each of these claims. Consequently, the failure to accurately describe reasons for the rejection of these individual independent claims renders the rejection vague and ambiguous thereby preventing Applicants from providing a proper rebuttal.

In the case of claim 28, Applicants respectfully submit that the cited prior art individually or combinedly fails to at least disclose the first set of ridges as defined in claim 28. Consequently, Applicants request withdrawal of the rejection followed by allowance of claim 28.

# Claim 29

Independent claim 29 cites features that are different from other independent claims. For example, claim 29 cites: "a second set of ridges formed in a second direction on the substrate, at least one ridge in the second set having a height that is different than a height of a ridge in the first set"

thereby defining two sets of ridges each containing at least one ridge having a height different than that of a ridge in the other set.

As pointed out above, independent claim 1 cites: "a first set of ridges formed in a first direction on the substrate, at least one of the ridges having a first portion of a first height and having a second portion of a second height," thereby defining two heights for a single ridge.

Here again, Applicants are unable to provide a proper rebuttal because the Office action fails to identify where in the cited prior art can be found anticipatory elements for this aspect of claim 29.

In the case of claim 29, Applicants respectfully submit that the cited prior art individually or combinedly fails to at least disclose the two sets of ridges as defined in claim 29. Consequently, Applicants request withdrawal of the rejection followed by allowance of claim 29.

# Claim 30

Because claim 5 is allowable, claim 30 that depends directly on claim 5 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Consequently, Applicants respectfully request withdrawal of the rejection, followed by allowance of claim 30.

# Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

# CONCLUSION

Applicants respectfully submit that pending claims 1, 3-7, 9, 22, and 24-30 are all allowable. Favorable reconsideration and allowance is hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned representative at (404) 610-5689.

Respectfully submitted,

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I hereby certify that this paper is being electronically transmitted to the Commissioner for Patents on the date shown below:

Date of transmission: 20 February 2007 Signature: /P. S. Dara/

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